STATE OF MARYLAND

DHMH

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February 25, 2009
Public Health & Emergency Preparedness Bulletin: # 2009:07
Reporting for the week ending 02/21/09 (MMWR Week #07)

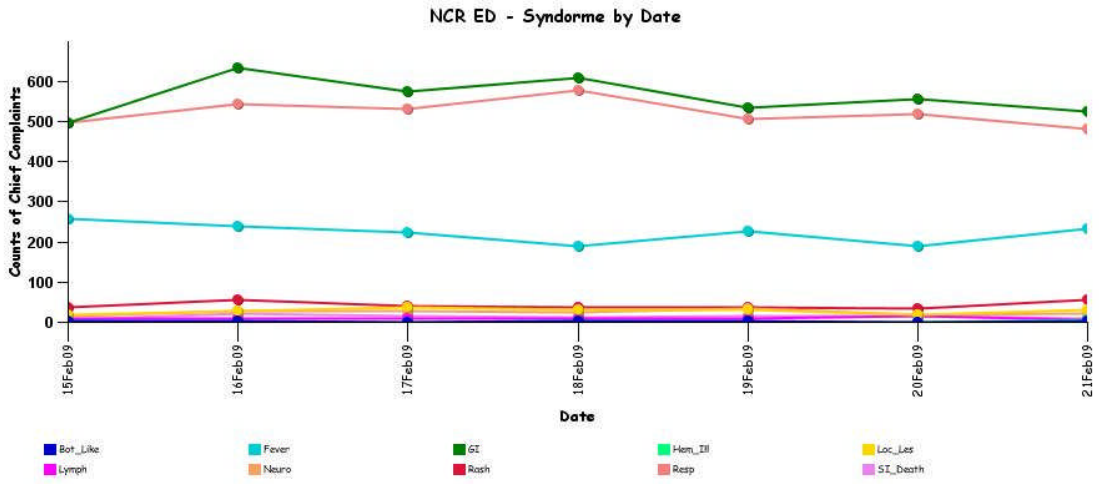
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

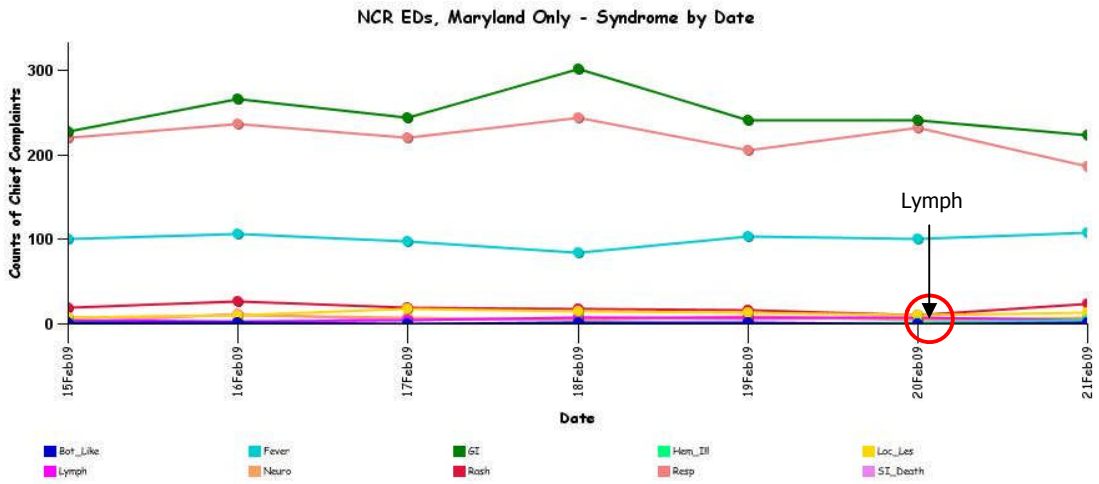
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

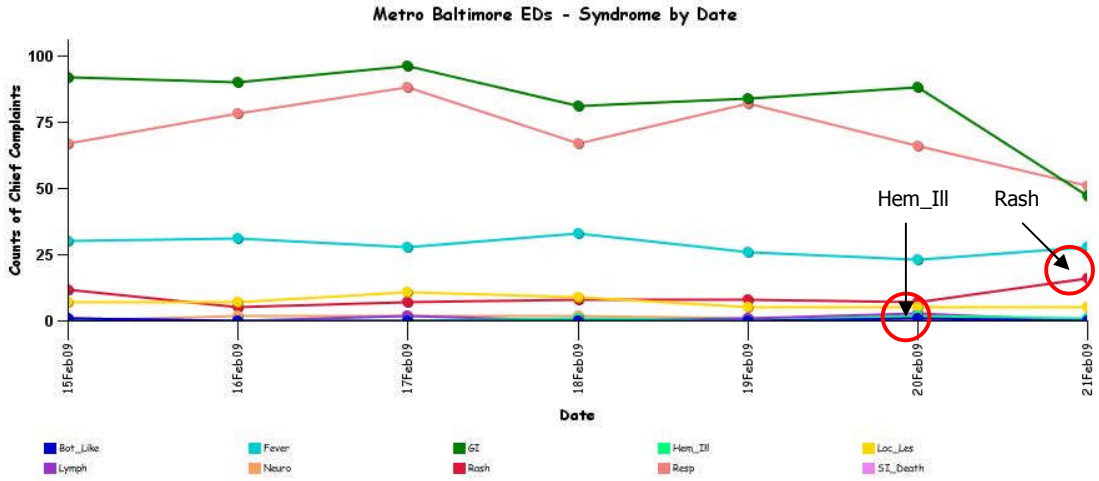
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.

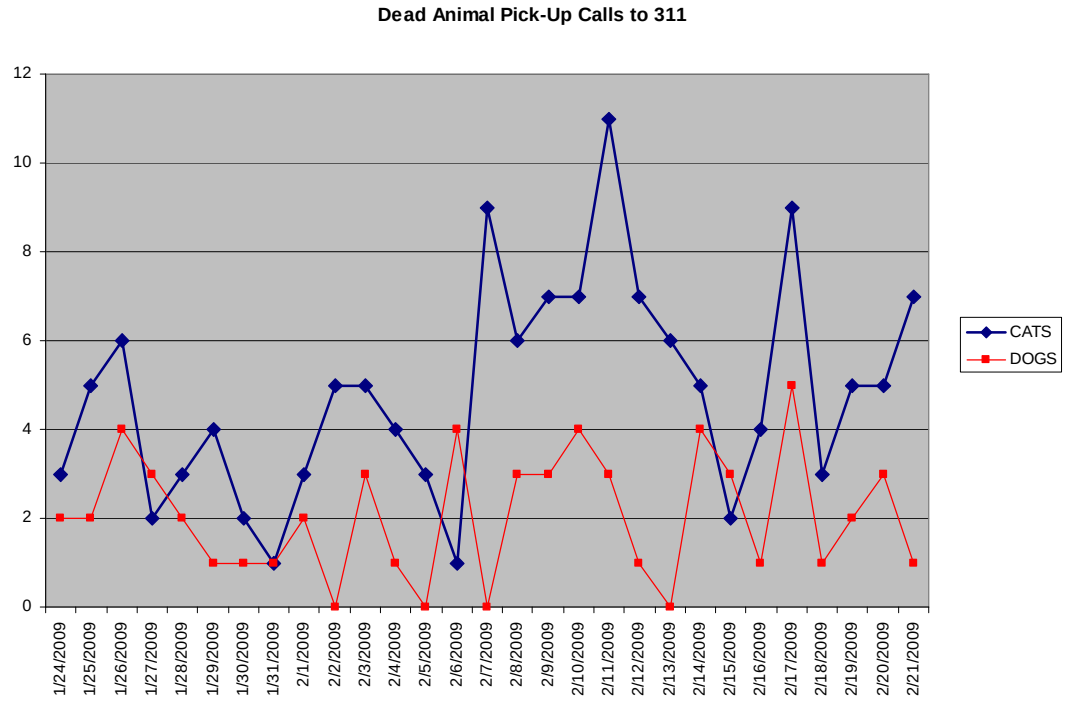


* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.



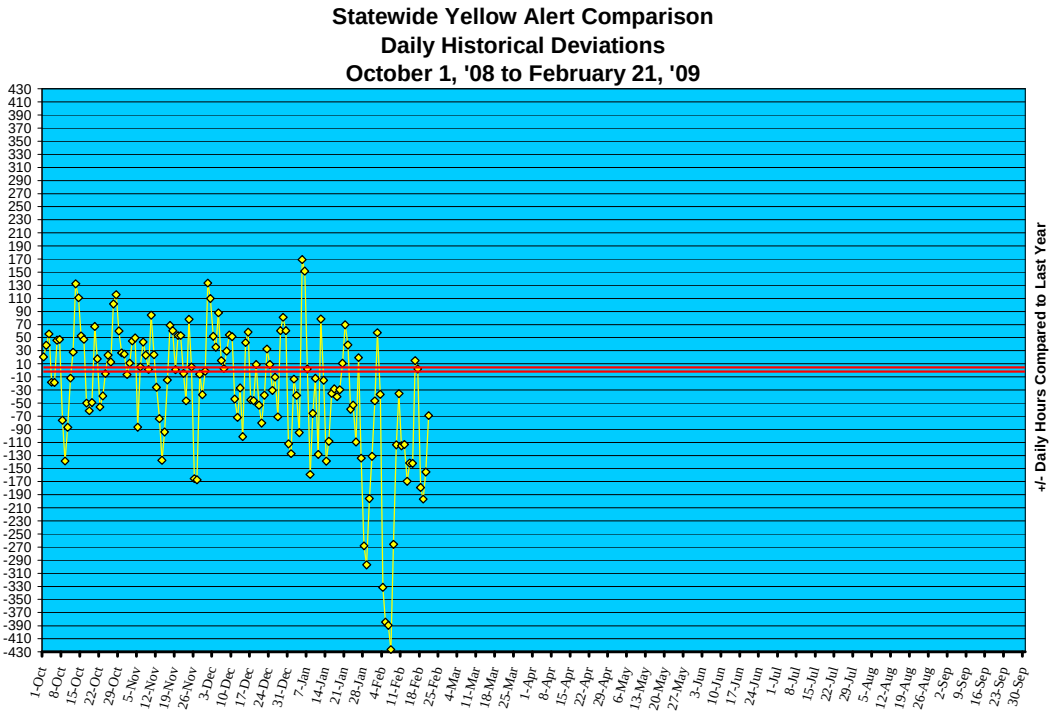
* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/08.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in January 2009 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (Feb 15 to Feb 21, 2009):	06	0
Prior week (Feb 8 to Feb 14, 2009):	07	1
Week#7, 2008 (Feb 10 to Feb 16, 2008):	12	1

OUTBREAKS: 10 outbreaks were reported to DHMH during MMWR Week 7 (Feb.15- Feb. 21, 2009):

7 Gastroenteritis outbreaks
3 outbreaks of GASTROENTERITIS associated with Nursing Homes
1 outbreak of GASTROENTERITIS associated with an Assisted Living Facility
1 outbreak of GASTROENTERITIS associated with a Hospital
1 outbreak of GASTROENTERITIS associated with a School
1 outbreak of GASTROENTERITIS associated with a Daycare

1 Respiratory illness outbreak
1 outbreak of PNEUMONIA associated with a Nursing Home

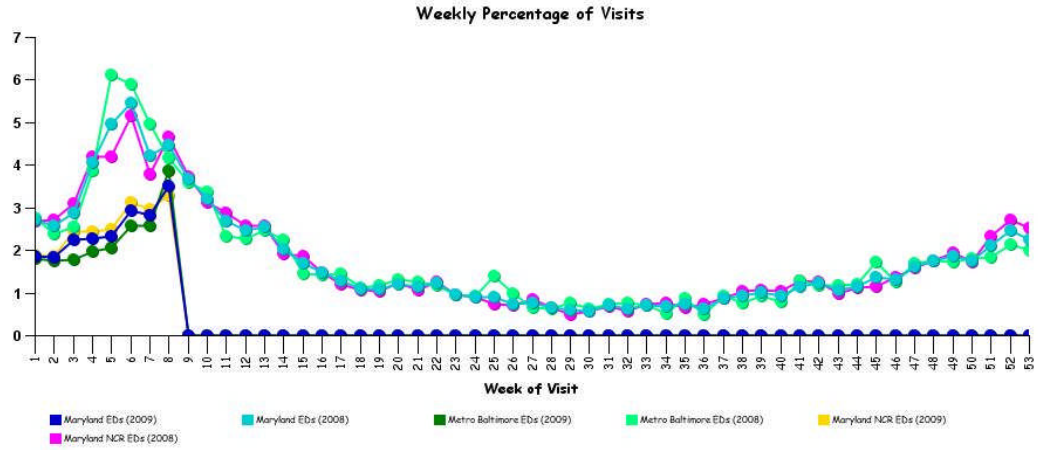
1 Rash illness outbreak
1 outbreak of CHICKENPOX associated with a School

1 Foodborne illness outbreak
1 outbreak of FOODBORNE ILLNESS associated with a School

MARYLAND SEASONAL FLU STATUS: Influenza activity in Maryland for Week 07 is WIDESPREAD. During week 07, 731 confirmed cases of influenza were reported to DHMH.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

WHO update: As of February 18, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 408, of which 254 have been fatal. Thus, the case fatality rate for human H5N1 is about 62%.

AVIAN INFLUENZA (Nepal): 20 Feb 2009, Less than 2 weeks after Nepal's government said the situation was under control in eastern Nepal, where the 1st bird flu outbreak was reported last month, fresh fears of another outbreak rose with another village in the same area close to the Indian border reporting poultry deaths. "Bird flu has been detected in Sharanmati village in Jhapa district," said Hari Dahal, spokesman at Nepal's Agriculture and Cooperatives Ministry. The village lies close to Nepal's border with India's West Bengal state, about 40 km south west of the border town of Kakarbhitta, where the 1st outbreak was reported in mid-January 2009. During the weekend, 150 chickens died in Sharanmati, Dahal said, leading to the government bringing samples to Kathmandu for examination. After the tests confirmed the presence of the H5N1 virus, the samples were sent to London's Weybridge Laboratory for further tests. They have just informed us that all the 7 samples tested positive," Dahal said. The government is sending a rapid action team to the village and setting up a control room. It is going to sound a high alert and declare emergency operations in and around the village. The culling of poultry will start afresh in the bird flu-hit tea district and surveillance on the border entries with India tightened. Dahal expressed fears that the ailing birds could have been smuggled from India for sale in Nepal. "India has bird flu outbreak in West Bengal, Sikkim and Assam states," he said. "The birds are likely to have been brought from there. They were hidden in a backyard." Dahal said that Kakarbhitta, where the first outbreak was reported, leading to the destruction of nearly 25,000 chickens and poultry products, had not reported any fresh signs of the disease. The disease has not been reported in humans in Nepal, the government said.

AVIAN INFLUENZA (Viet Nam): 20 Feb 2009, Bird flu has emerged in central Khanh Hoa Province, raising the number of provinces hit by bird flu to 10, according to the animal health department. Nguyen Van Trung's unvaccinated ducks and fowls tested positive yesterday for the H5N1 virus in Khanh Hoa Province's Vinh Phuong Commune. Officials are worried because 10 days ago, upon realizing that 3 fowls had died with virus symptoms, Trung's 6-member family and their guests ate them all. Trung threw other fowls away as they continued to die without informing local officials, according to the province's animal health department. Finally when 22 fowls had died he informed the department. Yesterday, the locality decontaminated Vinh Phuong Commune and checked the health of people who had eaten the contaminated birds. The Khanh Hoa provincial People's Committee also asked other localities to strictly supervise livestock breeding farms to facilitate quick discovery of, and solutions to, epidemic outbreaks. Bird flu has recently broken out in some Cuu Long delta provinces, primarily infecting flocks of free-range ducks, according to the region's animal health departments. Professor Vo Tong Xuan, former rector of An Giang University, said free-range ducks could carry the bird flu virus to disease-free provinces as they move to eat from harvested rice paddy fields. "Healthy people without protective clothing and masks who come within one metre of an infected bird are at high risk of contamination," said Tran Tinh Hien, deputy director of HCM City Tropical Disease Hospital.

AVIAN INFLUENZA, LPNAI H5 (South Korea): 19 Feb 2009, Korea's Ministry for Food, Agriculture, Forestry and Fisheries confirmed on 18 Feb 2009 that avian influenza recently occurred on 3 chicken farms in Korea's Suncheon and other parts of Jeollanam-do [South Jeolla] Province. The Ministry said that tests carried out on blood samples taken from poultry on 3 chicken farms in Suncheon, Gokseong County, and Boseong County in Jeollanam-do Province confirmed that the avian influenza virus found on all 3 chicken farms is low pathogenic H5 subtype. A total of 22 000 chickens on the 3 farms have been culled.

AVIAN INFLUENZA (Viet Nam): 19 Feb 2009, Bird flu is plaguing in 9 provinces in Vietnam with a newly-reported coastal province Khanh Hoa also finding the virus, according to the Department of Animal Health under the Ministry of Agriculture and Rural Development on Wednesday. In Khanh Hoa province of south central Vietnam, bird flu has killed 27 fowls raised at a local farm, said the department, Vietnam watchdog of bird flu. Samples of dead ducks found in the province tested positive to the H5N1 virus, said the department. So far this year, 9 provinces of Vietnam nationwide have been hit by avian flu, including 4 provinces in Mekong Delta, namely Ca Mau, Soc Trang, Hau Giang and Bac Lieu, 2 northern provinces of Bac Ninh and Quang Ninh, 2 central provinces of Nghe An and Quang Tri, and the newly-confirmed southern Khanh Hoa, said the department.

AVIAN INFLUENZA, HUMAN (Viet Nam): 18 Feb 2009, The Ministry of Health in Viet Nam has reported a new confirmed case of human infection with the H5N1 avian influenza virus. The case has been confirmed at the National Institute of Hygiene and Epidemiology (NIHE). The case is a 32-year old man from Kim Son district, Ninh Binh province. He developed symptoms on 5 Feb 2009 and was hospitalized on 13 Feb 2009. He is currently in a serious condition. The case is known to have had recent contact with sick poultry prior to the onset of his illness. Further investigations are currently underway. Control measures have been implemented and close contacts are being identified and monitored. Of the 109 cases confirmed to date in Viet Nam, 52 have been fatal.

NATIONAL DISEASE REPORTS:

BRUCELLOSIS (Wyoming): 20 Feb 2009, The 4th year of a 5-year pilot test-and-removal program on 3 western Wyoming elk feed-grounds concluded on 13 Feb 2009. A total of 50 cow elk tested positive for the brucellosis over January and February 2009, including 5 that tested positive on Friday and were shipped to slaughter. In 2 separate efforts in January and February 2009, state wildlife officials trapped and processed 932 elk through the chutes at the 3 feed-grounds, including 421 adult females that were subject to brucellosis testing. All 50 cow elk that tested positive for the disease were transported to an eastern Idaho slaughterhouse for processing. The brucellosis testing project is a recommendation of the Wyoming Brucellosis Coordination Team in an effort to reduce the brucellosis rate in the Pinedale elk herd. Brucellosis is a contagious disease that causes abortions in hoofed animals and is present in elk and bison in the Yellowstone region. Brucellosis transmitted to cattle herds from elk caused Wyoming to lose its brucellosis-free market status in 2004. Wyoming later regained its brucellosis-free status in September 2006. However, cattle from a herd near Daniel were found to be positive for the disease in June 2008. That cattle herd was sent to slaughter. (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

ANTHRAX, BOVINE (Mongolia): 20 Feb 2009, Two heifers have died from anthrax in Chandmani-undur and Ulaan-uul soums districts of Khovsgol province, respectively. This area is already registered as the anthrax infected zone. These 2 heifers were not vaccinated with the anthrax vaccine and heifers were diagnosed with anthrax based on bacteriologic test, microscopic examination, anthrax rapid testing kit, and Ascoli test in the Aimag province veterinary laboratory. The area is always covered with snow in the winter season but this year the area is without snow and with dust storms. Local animals are grazing outside all year around. Recently anthrax spread has been occurring during the winter season making it a problematic issue. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

LASSA FEVER, FATAL (United Kingdom): 19 Feb 2009, Health officials have said the public are not at risk after a patient at a London hospital died of Lassa fever. The Health Protection Agency (HPA) said the death at University College Hospital was an isolated case and the patient had been working in Africa. The Agency is trying to identify members of staff or healthcare workers who might have had contact with the patient who had been to Mali. Patients and visitors to the hospital are not at risk, the HPA said. Last month, a 66-year-old east London man, who had been traveling in Nigeria, died of Lassa fever at London's Royal Free Hospital. The fever is caused by a virus and is endemic in Nigeria, Sierra Leone, Liberia, Guinea, and the Central African Republic. Dr Dilys Morgan, a Lassa fever expert at the Health Protection Agency, said: "These people will be provided with information about Lassa fever and asked to get in contact with us should they develop any symptoms." (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

ANTHRAX, HUMAN, WILDLIFE, SUSPECTED (Uganda): 18 Feb 2009, The health ministry has said 5 people have died after eating meat believed to be infected with anthrax in Katunguru sub-county in Bushenyi district. "A total of 159 people are being monitored by our surveillance team for possible symptoms of anthrax after being exposed to the risk," Paul Kaggwa, the health ministry spokesperson, told The New Vision yesterday. The first 2 deaths occurred on 14 Feb 2009 at Kisenyi landing site and 3 more deaths were registered between 14-17 Feb 2009. They are believed to have eaten a carcass of an antelope. Two other people were sent to Lugazi health centre for medical check up after complaining of abdominal pains. Kaggwa urged people to desist from eating wild animals. "The infected animal strayed out of Queen Elizabeth National Park around 27 Jan 2009 and the residents slaughtered it," said Kaggwa. "They developed abdominal pains, the 1st symptom and it was reported on 6 Feb 2009." The health ministry has advised people in the affected area to report to health centres if they develop symptoms associated with anthrax. A joint team from the Uganda Wild Life Authority, the health and agriculture ministries and the School of Public Health, Makerere University, has been dispatched to Bushenyi to study the situation. Moses Mapesa, the executive director of UWA, said he would wait for a report from his technical team and health officials before confirming the outbreak. "We have dealt with disease outbreaks before. We need to get the confirmatory tests first," Mapesa said. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

EBOLA HEMORRHAGIC FEVER (Democratic Republic of the Congo): 17 Feb 2009, The Ministry of Health of the Democratic Republic of the Congo has on 16 Feb 2009 declared the end of the Ebola epidemic in the Mweka and Luebo health zones in the Province of Kasai Occidental. The last person to be infected by the virus died on 1 Jan 2009. This is more than double the maximum incubation period (42 days) for Ebola. As of 17 Feb 2009, the health authorities have reported a total of 32 cases, including 15 deaths from Ebola. These 32 cases include confirmed, probable, and suspect cases. During this outbreak, Ebola virus infection was confirmed by laboratory tests at the Institut National de Recherches Biologiques (INRB) in Kinshasa, the Centre International de Recherches Medicales de Franceville (CIRMF) in Gabon, and the National Institute for Communicable Diseases (NICD), South Africa. The WHO Country Office, Regional Office, and Headquarters supported the MoH in Kinshasa and in the field at the location of the outbreak. The international response to the outbreak also involved UNICEF, the UN Mission in the Democratic Republic of the Congo, and the World Food Programme, as well as support from Caritas, and the Congolese (DRC) Red Cross, together with partners in the Global Outbreak Alert and Response Network (GOARN), including the National Microbiology Laboratory of the Public Health Agency of Canada, CIRMF, and NICD, and Medecins Sans Frontieres. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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